

**EXHIBIT**

**A**

RULE 63 (37 C.F.R. 1.63)  
DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name, and I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled "**Method and Apparatus for Generating Random Numbers for Use in a Field Programmable Gate Array**", the specification of which is attached hereto, bearing Attorney Docket No. 069102/0278146.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose all information known to me to be material to patentability as defined in 37 C.F.R. 1.56. I hereby claim foreign priority benefits under 35 U.S.C. 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate filed by me or my assignee disclosing the subject matter claimed in this application and having a filing date (1) before that of the application on which priority is claimed, or (2) if no priority claimed, before the filing date of this application:

PRIOR FOREIGN APPLICATION(S):			Date first Laid- open or Published	Date Patented or Granted	Priority Claimed Yes <input type="checkbox"/> No <input type="checkbox"/>
Number	Country	Day/MONTH/Year Filed			

I hereby claim domestic priority benefit under 35 U.S.C. 119/120/365 of the indicated United States applications listed below and PCT international applications listed above or below and, if this is a continuation-in-part (CIP) application, insofar as the subject matter disclosed and claimed in this application is in addition to that disclosed in such prior applications, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in 37 C.F.R. 1.56 which became available between the filing date of each such prior application and the national or PCT international filing date of this application:

PRIOR U.S. PROVISIONAL, NONPROVISIONAL AND/OR PCT APPLICATION(S)			Status	Priority Claimed?
Application No.:	Day/MONTH/Year Filed:		pending, abandoned, patented)	Yes <input type="checkbox"/> No <input type="checkbox"/>

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

And I hereby appoint Pillsbury Winthrop LLP, 1600 Tysons Boulevard, McLean Virginia, 22102, telephone number (650) 233-4777 (to whom all communications are to be directed), and the below-named persons (of the same address) individually and collectively my attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith and with the resulting patent, and I hereby authorize them to delete persons no longer with their firm and to act and rely on instructions from and communicate directly with the person/assignee who first sent this case to them and by whom I hereby declare that I have consented after full disclosure to be represented until I instruct the above Firm and/or a below attorney in writing to the contrary.

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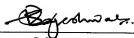
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## Declaration and Power of Attorney for Patent Application

3. INVENTOR'S SIGNATURE: \_\_\_\_\_



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0925155-080801

# **EXHIBIT**

## **B**



US007072927B1

(12) **United States Patent**  
**Purcell et al.**

(10) **Patent No.:** **US 7,072,927 B1**  
 (45) **Date of Patent:** **Jul. 4, 2006**

(54) **METHOD AND APPARATUS FOR GENERATING RANDOM NUMBERS FOR USE IN A FIELD PROGRAMMABLE GATE ARRAY**

(56) **References Cited**

# U.S. PATENT DOCUMENTS

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 899 days.

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(57) **ABSTRACT**

(21) Appl. No.: **09/925,155**

(22) Filed: **Aug. 8, 2001**

(51) **Int. Cl.**  
**G06F 17/10** (2006.01)  
**G06F 1/02** (2006.01)

(52) **U.S. Cl.** ..... **708/300; 708/256**

(58) **Field of Classification Search** ..... **708/300, 708/256, 253**

See application file for complete search history.

A method and apparatus for generating random number outputs utilized in generating a noise function at a given location in space. The method consists of partitioning selected portions of the random number generation process to achieve outputs in parallel. The relevant parallel outputs are weighted by effect and then summed together to give the amplitude of the noise function at the given location.

**17 Claims, 8 Drawing Sheets**

